STEREO MAIN AMPLIFIER

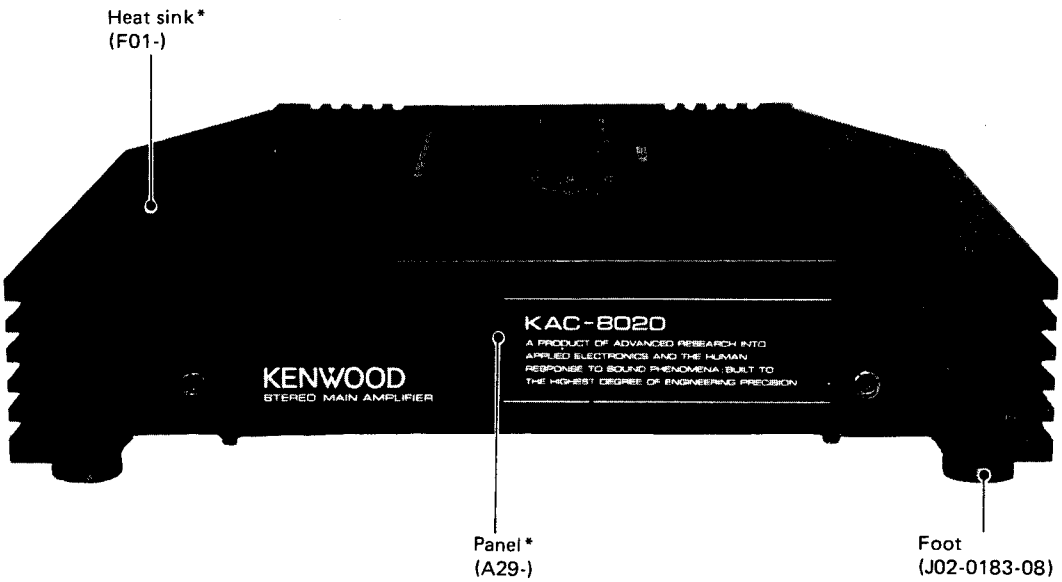
KAC-8020

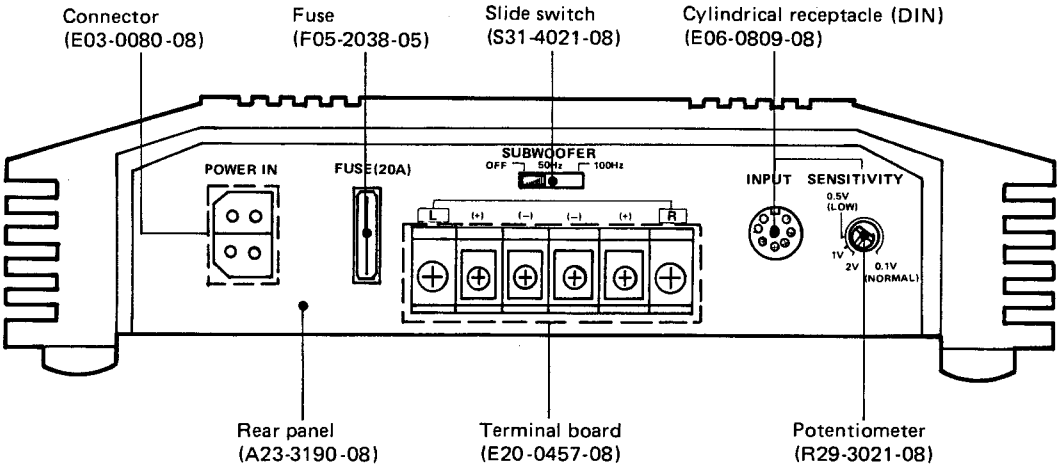
SERVICE MANUAL

KENWOOD

TRIO-KENWOOD CORPORATION

© 1986-3 PRINTED IN JAPAN
B51-1955-00(O)1928

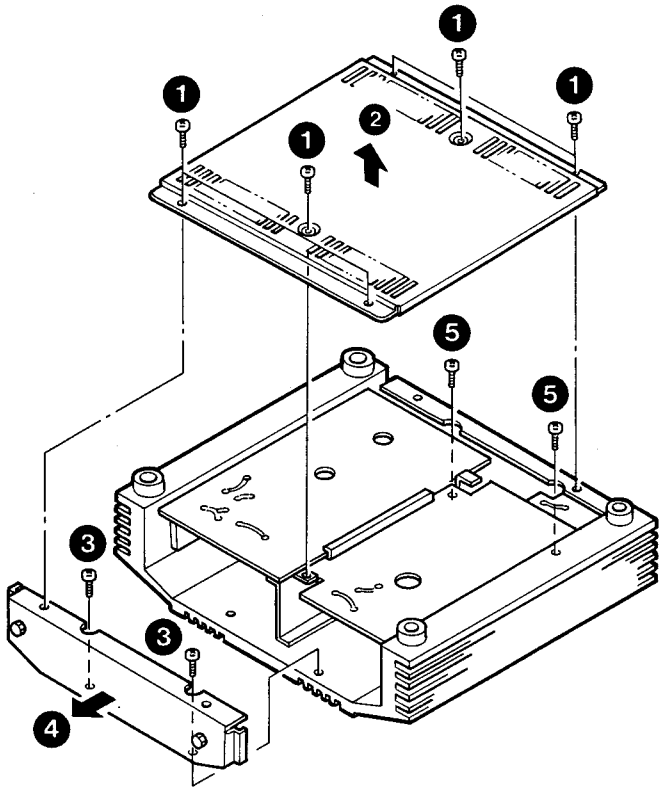


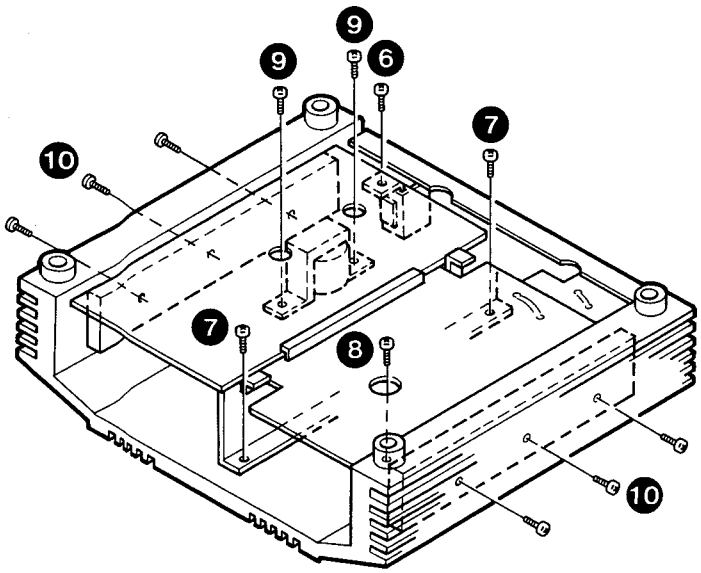


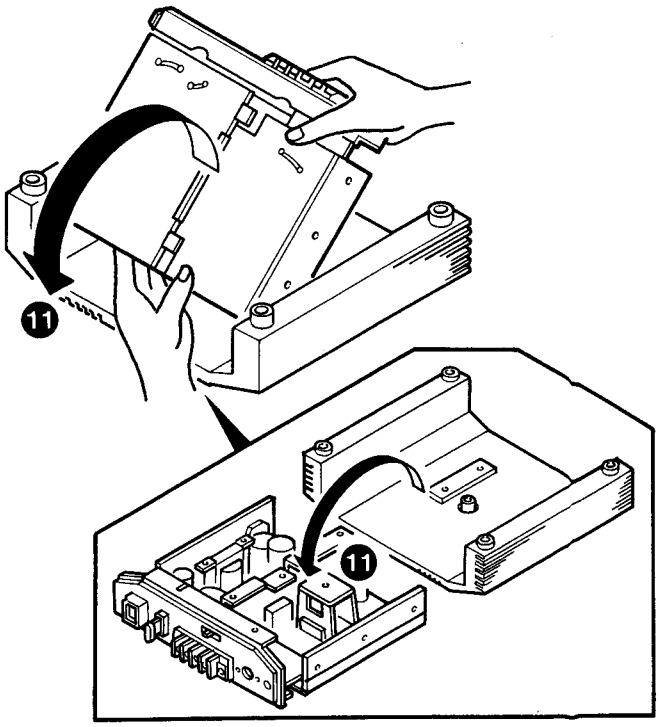
*Refer to parts list on page 6.

DISASSEMBLY FOR REPAIR

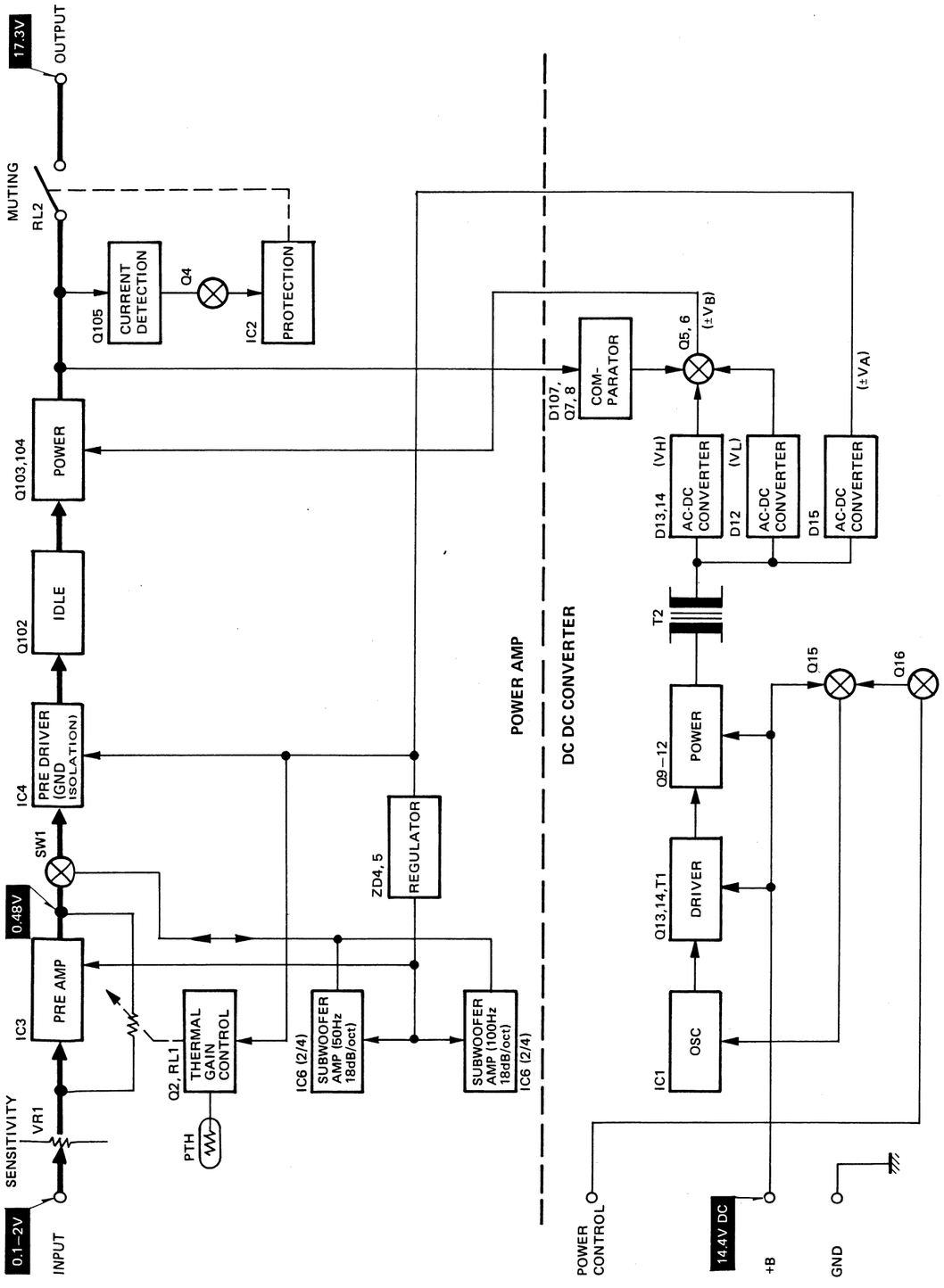
Disassembly as follow (NO. ❶ to ⓫).







BLOCK LEVEL DIAGRAM



ADJUSTMENT/REGLAGE/ABGLEICH/PACKING

ADJUSTMENT

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	AMPLIFIER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
1	IDLE CURRENT	–	Connect a DC voltmeter to TP.	VOLUME: 0	VR101 (L) VR201 (R)	12mV	(a)

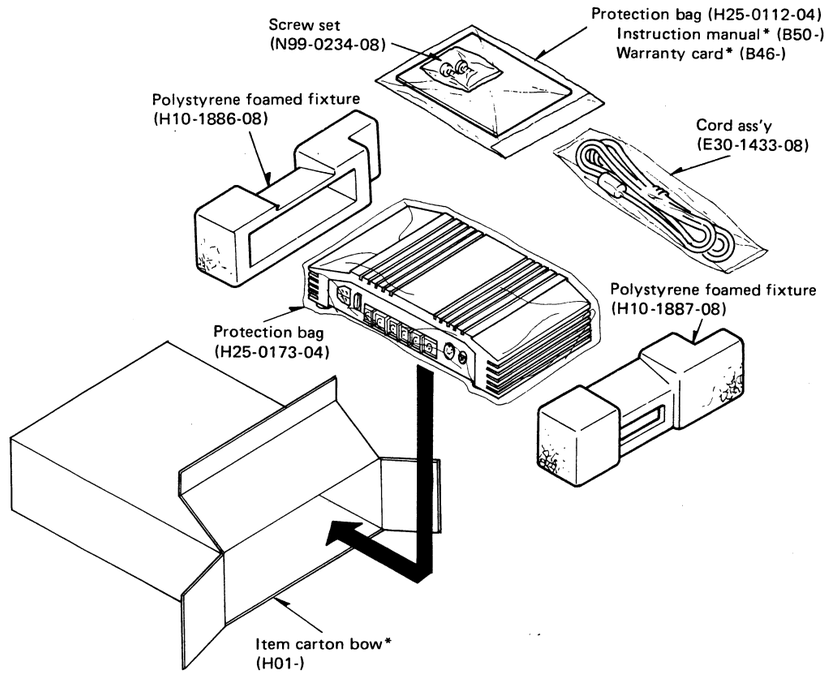
REGLAGE

N°	ITEM	REGLAGE DE L'ENTREE	REGLAGE DE LA SORTIE	REGLAGE DE L'AMPLIFICATEUR	POINTS DE L'ALIGNMENT	ALIGNER POUR	FIG.
1	COURANT DE POLARISATION	–	Connecter un voltmètre de CC au TP.	VOLUME: 0	VR101 (G) VR201 (D)	12mV	(a)

ABGLEICH

NR.	GEGENSTAND	EINGANGS-EINSTELLUNG	AUSGANG-EINSTELLUNG	VORSTÄRKER-EINSTELLUNG	ABGLEICHE-PUNKTE	ABGLEICHEEN FÜR	ABB.
1	LEERLAUF-STROM	–	Einen Gleichspannungs-messer zu TP anschließen.	VOLUME: 0	VR101 (L) VR201 (R)	12mV	(a)

PACKING



*Refer to parts list on page 6.

PC BOARD

	B	C	E
Q5	32V	16.5V	33V
Q6	8.1V	32V	16.5V
Q7	35.5V	4.1V	–
Q8	2.3V	35.5V	10.8V
Q9–Q12	–1.4V	15.3V	–
Q13,Q14	–1.45V	14.3V	–
Q15	13.6V	14.1V	14.3V
Q16	0.7V	0V	–

W02 (B/6)
IC1

1	5.1V
2,4	1.45V
5	1.2V
6	1.85V
7	2.7V

W02-0706-08 (A/6)
IC2

1	1.3V
4	1.8V
6	0.8V
7	2.1V
8	3.7V

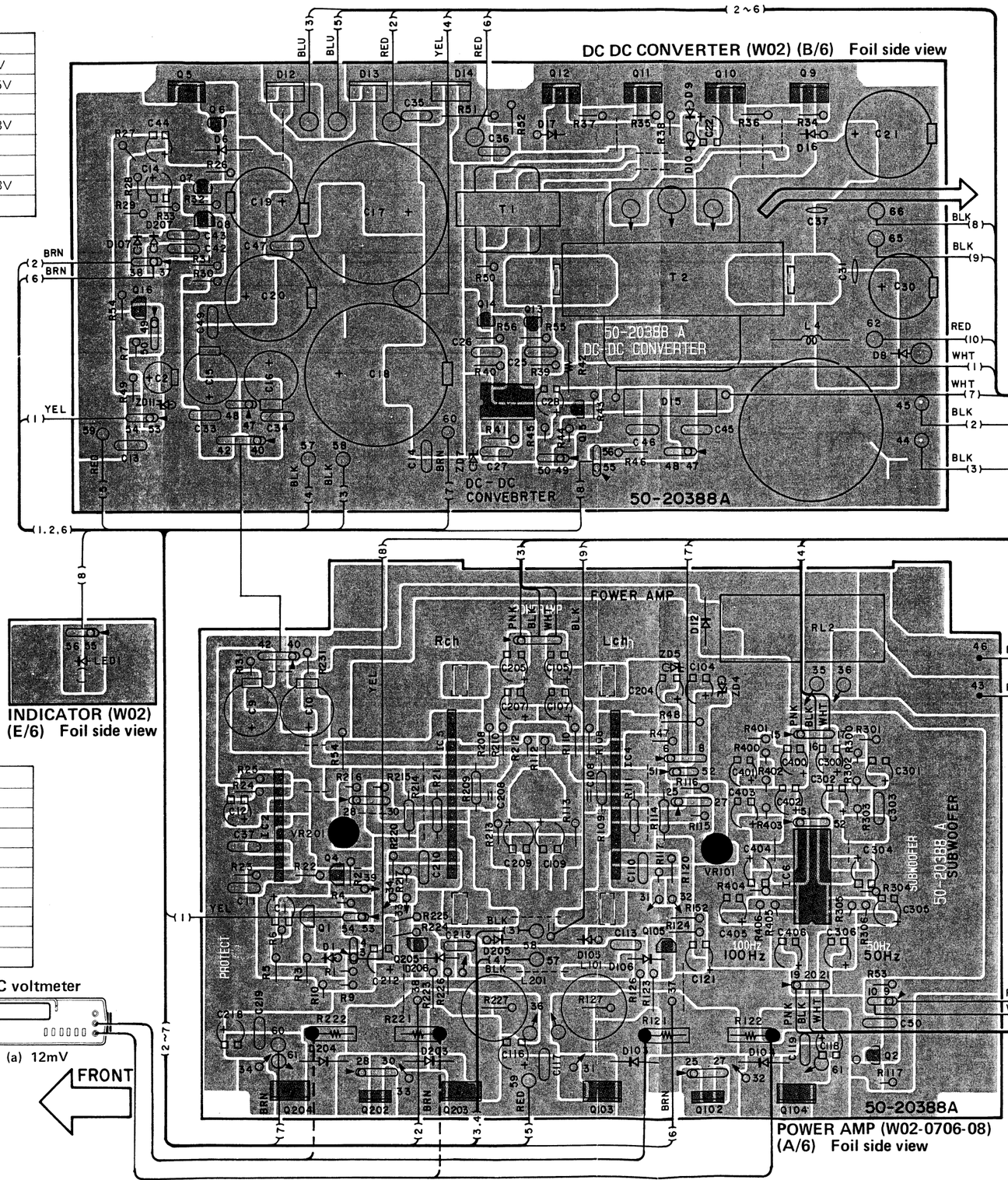
IC4, 5

1,2	35V
3	29V
4,5	0.2V
6	–33.5V
7	–1.2V
8	0.5V
9,10	–35V
11	–0.5V
12	0.5V

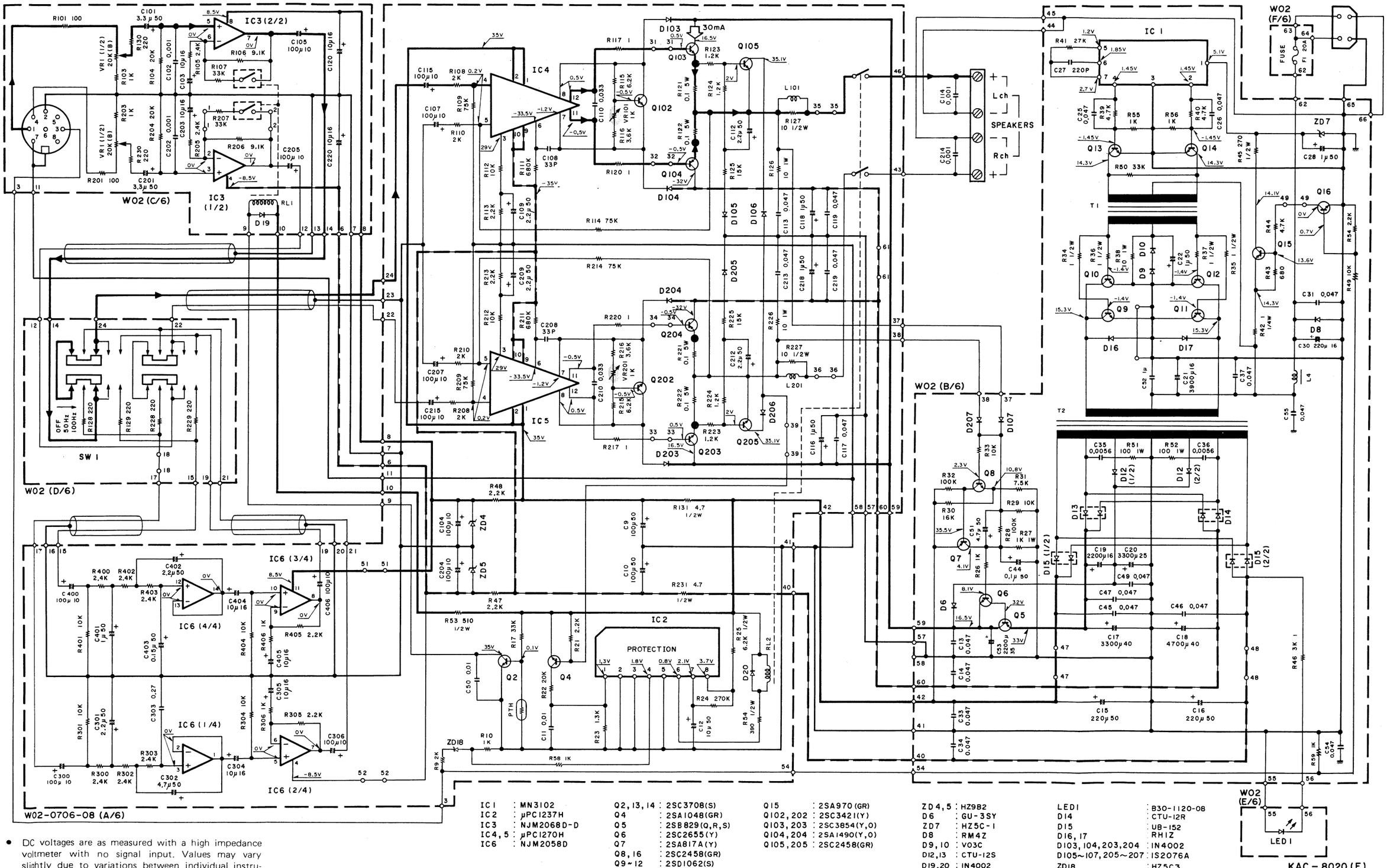
	B	C	E
Q2	0.1V	35V	–
Q102	–0.5V	–	–
Q103	0.5V	16.5V	–
Q104	–0.5V	–32V	–
Q105	2V	35.1V	–
Q202	–0.5V	–	–
Q203	0.5V	16.5V	–
Q204	–0.5V	–32V	–
Q205	2V	35.1V	–

W02 (C/6)
IC3

1–3	0V
4	–8.5V
5–7	0V
8	8.5V



Refer to the schematic diagram for the values of resistors and capacitors.

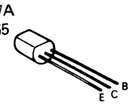


- DC voltages are as measured with a high impedance voltmeter with no signal input. Values may vary slightly due to variations between individual instruments or/and units.

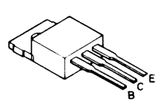
IC1	: MN3102	Q2,13,14	: 2SC3708(S)	Q15	: 2SA970(GR)	ZD4,5	: HZ9B2
IC2	: μPC1237H	Q4	: 2SA1048(GR)	Q102,202	: 2SC3421(Y)	D6	: GU-3SY
IC3	: NJM2068D-D	Q5	: 2SB829(Q,R,S)	Q103,203	: 2SC3854(Y,O)	ZD7	: HZ5C-1
IC4,5	: μPC1270H	Q6	: 2SC2655(Y)	Q104,204	: 2SA1490(Y,O)	D8	: RM4Z
IC6	: NJM2058D	Q7	: 2SA817A(Y)	Q105,205	: 2SC2458(GR)	D9,10	: V03C
		Q8,16	: 2SC2458(GR)			D12,13	: CTU-12S
		Q9~12	: 2SD1062(S)			D19,20	: IN4002

LED1	: B30-1120-08
D14	: CTU-12R
D15	: UB-152
D16, 17	: RH1Z
D103, 104, 203, 204	: IN4002
D105~107, 205~207	: IS2076A
ZD18	: HZ5C3

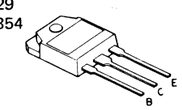
2SA970
2SA817A
2SC2655



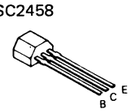
2SC3708



2SA1490
2SB829
2SC3854



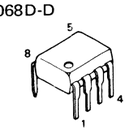
2SA1048
2SC2458



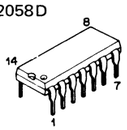
2SC3421

2SD1062

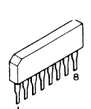
NJM2068D-D



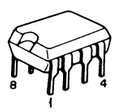
NJM2058D



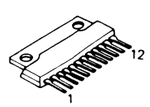
μPC1237H



MN3102



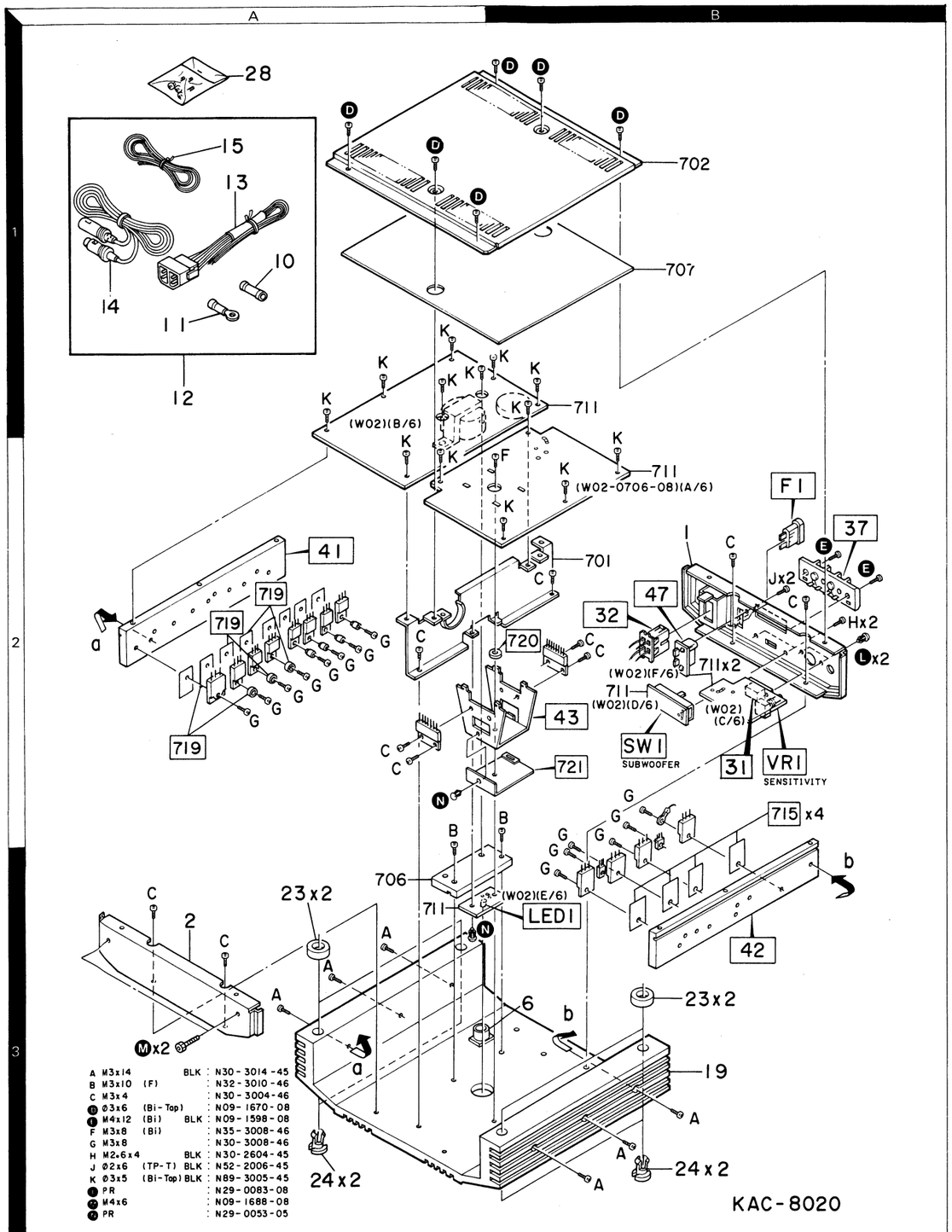
μPC1270H



KAC-8020

KENWOOD

EXPLODED VIEW



KAC-8020

Parts with the exploded numbers larger than 700 are not supplied.

PARTS LIST

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
			KAC-8020			
1	2B	*	A23-3190-08	REAR PANEL		
2	3A	*	A29-0080-08	PANEL		
2	3A	*	A29-0081-08	PANEL	T	
6	3B	*	B19-0398-08	LIGHTING BOARD		
-			B46-0100-00	WARRANTY CARD		
-			B46-0123-03	WARRANTY CARD	T	
-		*	B50-6148-00	INSTRUCTION MANUAL(ENG,FR)		
-		*	B50-6149-00	INSTRUCTION MANUAL(ENGLISH)		
-		*	B50-6150-00	INSTRUCTION MANUAL(GER,ITAL)	T	
10	1A	*	E23-0146-05	CRIMP SLEEVE		
11	1A	*	E23-0147-05	CLIMP TERMINAL		
12	1A		E30-1433-08	CORD ASSY		
13	1A		E30-1435-08	DC POWER CORD		
14	1A		E30-1436-08	DIN EXTENTION CORD		
15	1A	*	E30-1443-08	EXTENTION CORD		
19	3B	*	F01-1112-08	HEAT SINK		
19	3B	*	F01-1113-08	HEAT SINK	T	
-			B58-0245-33	CAUTION CARD		
-		*	H01-7148-08	ITEM CARTON BOX		
-		*	H01-7149-08	ITEM CARTON BOX	T	
-		*	H03-0817-08	OUTER PACKING CASE		
-		*	H03-0818-08	OUTER PACKING CASE	T	
-		*	H10-1886-08	POLYSTYRENE FOAMED FIXTURE		
-		*	H10-1887-08	POLYSTYRENE FOAMED FIXTURE		
-		*	H13-0003-08	CARTON BOARD		
-			H25-0096-04	PROTECTION BAG		
-			H25-0112-04	PROTECTION BAG		
-			H25-0173-04	PROTECTION BAG		
23	3A,3B	*	J02-0183-08	FOOT		
24	3A,3B	*	J19-2677-08	HOOT HOLDER		
28	1A	*	N99-0234-08	SCREW SET		
D	1A,1B	*	N09-1670-08	SCREW (Ø3X6)		
E	2B	*	N09-1598-08	SCREW (Ø4X12)		
L	2B		N29-0083-08	PUSH RIVET		
M	3A	*	N09-1688-08	SCREW (M4X6)		
			AMP UNIT (W02-0706-08)			
LED1	3B		B30-1120-08	LED (POWER)		
C9 ,10			CE04DW1H101M	ELECTRO 100UF 50WV		
C11		*	CQ92M1H103K	MYLAR 0.010UF K		
C12			CE04DW1H101M	ELECTRO 100UF 50WV		
C13 ,14			CF92V1H473J	MF 0.047UF J		
C15 ,16		*	C90-1414-08	ELECTRO 220UF 50WV		
C17		*	C90-1412-08	ELECTRO 3300UF 40WV		
C18		*	C90-1411-08	ELECTRO 4700UF 40WV		
C19		*	CE04DW1C222M	ELECTRO 2200UF 16WV		
C20		*	C90-1413-08	ELECTRO 3300UF 25WV		
C21			C90-1356-08	ELECTRO 3900UF 16WV		
C22			CE04DW1H010M	ELECTRO 1.0UF 50WV		
C25 ,26			CF92V1H473J	MF 0.047UF J		

E: Scandinavia & Europe H:Audio Club K: USA P: Canada W:Europe
A : Saudi Arabia T: England U: PX(Far East, Hawaii)
UE: AAFES(Europe) X: Australia M: Other Areas

⚠ indicates safety critical components.

PARTS LIST

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Telle ohne **Parts No.** werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
C27			CQ92M1H221K	MYLAR 220PF K		
C28			CE04DW1H010M	ELECTRO 1.0UF 50WV		
C30		*	CE04DW1E221M	ELECTRO 220UF 25WV		
C31		*	CK45B1H473K	CERAMIC 0.047UF K		
C33 ,34			CF92V1H473J	MF 0.047UF J		
C35 ,36			CF92V1H562J	MF 5600PF J		
C37		*	CK45B1H473K	CERAMIC 0.047UF K		
C44			CE04DW1H0R1M	ELECTRO 0.1UF 50WV		
C45 -47			CF92V1H473J	MF 0.047UF J		
C49			CF92V1H473J	MF 0.047UF J		
C50		*	CQ92M1H103K	MYLAR 0.010UF K		
C51			CE04DW1H4R7M	ELECTRO 4.7UF 50WV		
C52			C91-0843-08	MYLAR 1UF J		
C53			CE04DW1V222M	ELECTRO 2200UF 35WV		
C54 ,55		*	CK45B1H473K	CERAMIC 0.047UF K		
C101			CE04DW1H3R3M	ELECTRO 3.3UF 50WV		
C102		*	CQ92M1H102K	MYLAR 1000PF K		
C103			CE04DW1C100M	ELECTRO 10UF 16WV		
C104,105			CE04DW1A101M	ELECTRO 100UF 10WV		
C107			CE04DW1A101M	ELECTRO 100UF 10WV		
C108		*	CC45CH1H330K	CERAMIC 33PF K		
C109			CE04DW1H2R2M	ELECTRO 2.2UF 50WV		
C110			CQ92M1H333K	MYLAR 0.033UF K		
C112			CE04DW1H2R2M	ELECTRO 2.2UF 50WV		
C113			CF92V1H473J	MF 0.047UF J		
C114		*	CK45B1H102K	CERAMIC 1000PF K		
C115			CE04DW1A101M	ELECTRO 100UF 10WV		
C116			CE04DW1H010M	ELECTRO 1.0UF 50WV		
C117			CF92V1H473J	MF 0.047UF J		
C118			CE04DW1H010M	ELECTRO 1.0UF 50WV		
C119			CF92V1H473J	MF 0.047UF J		
C120			CE04DW1C100M	ELECTRO 10UF 16WV		
C201			CE04DW1H3R3M	ELECTRO 3.3UF 50WV		
C202		*	CQ92M1H102K	MYLAR 1000PF K		
C203			CE04DW1C100M	ELECTRO 10UF 16WV		
C204,205			CE04DW1A101M	ELECTRO 100UF 10WV		
C207			CE04DW1A101M	ELECTRO 100UF 10WV		
C208		*	CC45CH1H330K	CERAMIC 33PF K		
C209			CE04DW1H2R2M	ELECTRO 2.2UF 50WV		
C210			CQ92M1H333K	MYLAR 0.033UF K		
C212			CE04DW1H2R2M	ELECTRO 2.2UF 50WV		
C213			CF92V1H473J	MF 0.047UF J		
C214		*	CK45B1H102K	CERAMIC 1000PF K		
C215			CE04DW1A101M	ELECTRO 100UF 10WV		
C218			CE04DW1H010M	ELECTRO 1.0UF 50WV		
C219			CF92V1H473J	MF 0.047UF J		
C220			CE04DW1C100M	ELECTRO 10UF 16WV		
C300			CE04DW1A101M	ELECTRO 100UF 10WV		
C301			CE04DW1H2R2M	ELECTRO 2.2UF 50WV		
C302			CE04DW1H4R7M	ELECTRO 4.7UF 50WV		
C303			CF92V1H274J	MF 0.27UF J		
C304,305			CE04DW1C100M	ELECTRO 10UF 16WV		
C306			CE04DW1A101M	ELECTRO 100UF 10WV		
C400			CE04DW1A101M	ELECTRO 100UF 10WV		
C401			CE04DW1H010M	ELECTRO 1.0UF 50WV		

E: Scandinavia & Europe H:Audio Club K: USA P: Canada W:Europe
A : Saudi Arabia T: England U: PX(Far East, Hawaii)
UE : AAFES(Europe) X: Australia M: Other Areas

⚠ indicates safety critical components.

PARTS LIST

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Telle ohne **Parts No.** werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
C402			CE04DW1H2R2M	ELECTRO 2.2UF 50WV		
C403		*	CE04DW1HR15M	ELECTRO 0.15UF 50WV		
C404,405			CE04DW1C100M	ELECTRO 10UF 16WV		
C406			CE04DW1A101M	ELECTRO 100UF 10WV		
31	2B		E06-0809-08	CYLINDRICAL RECEPTACLE (DIN)		
32	2B		E03-0080-08	CONNECTOR (POWER)		
37	2B		E20-0457-08	TERMINAL BOARD		
41	2A	*	F01-1114-08	HEAT SINK		
42	3B	*	F01-1115-08	HEAT SINK		
43	2B	*	F01-1116-08	HEAT SINK		
F1	2B	*	F05-2038-05	FUSE (20A)		
47	2B		J13-0063-08	FUSE HOLDER		
L4		*	L33-0318-08	CHOKE COIL		
L101			L39-0113-08	COIL		
L201			L39-0113-08	COIL		
T1			L19-0035-08	TRANSFORMER		
T2		*	L19-0046-08	TRANSFORMER		
N	2A,3A		N29-0053-05	PUSH RIVET		
R25		*	RD14BB2H622J	RD 6.2K J 1/2W		
R27			RS14GB3A102J	FL-PROOF RS 1.0K J 1W		
R34 -37			RD14BB2H010J	RD 1 J 1/2W		
R38			RS14GB3A100J	FL-PROOF RS 10 J 1W		
R42			R92-0351-08	RN 1 J 1/4W		
R45		*	RD14BB2H271J	RD 270 J 1/2W		
R46		*	RS14GB3A302J	FL-PROOF RS 3.0K J 1W		
R47 ,48		*	RD14BB2H2R2J	RD 2.2 J 1/2W		
R51 ,52			RS14GB3A101J	FL-PROOF RS 100 J 1W		
R53		*	RD14BB2H511J	RD 510 J 1/2W		
R57		*	RD14BB2H391J	RD 390 J 1/2W		
R121,122		*	R92-0268-08	RS 0.1 K 5W		
R126			RS14GB3A100J	FL-PROOF RS 10 J 1W		
R127			RD14BB2H100J	RD 10 J 1/2W		
R131			RD14BB2H4R7J	RD 4.7 J 1/2W		
R221,222		*	R92-0268-08	RS 0.1 K 5W		
R226			RS14GB3A100J	FL-PROOF RS 10 J 1W		
R227			RD14BB2H100J	RD 10 J 1/2W		
R231			RD14BB2H4R7J	RD 4.7 J 1/2W		
VR1	2B		R29-3021-08	POTENTIOMETER(20KB)SENSITIVITY		
VR101			R12-1054-05	TRIMMING POT.(1KB) IDLE		
VR201			R12-1054-05	TRIMMING POT.(1KB) IDLE		
RL1		*	S51-0001-08	RELAY (THERMAL GAIN CONTROL)		
RL2			S51-2080-08	RELAY (MUTING)		
SW1	2B	*	S31-4021-08	SLIDE SWITCH (SUB WOOFER)		
D6		*	GU-3SY	DIODE		
D8			RM4Z	DIODE		
D9 ,10			V03C	DIODE		
D12 ,13			CTU-12S	DIODE		
D14			CTU-12R	DIODE		
D15			UB-152	DIODE		
D16 ,17			RH1Z	DIODE		
D19 ,20			1N4002	DIODE		
D103,104			1N4002	DIODE		
D105-107			1S2076A	DIODE		

E: Scandinavia & Europe H:Audio Club K: USA P: Canada W:Europe
A : Saudi Arabia T: England U: PX(Far East, Hawaii)
UE : AAFES(Europe) X: Australia M: Other Areas

⚠ indicates safety critical components.

PARTS LIST

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
D203,204			1N4002	DIODE		
D205-207			1S2076A	DIODE		
IC1			MN3102	IC(CLOCK GENERATOR/V OPERATION		
IC2			UPC1237H	IC(PROTECTION)		
IC3			NJM2068D-D	IC(OP AMP X2)		
IC4 ,5			UPC1270H	IC(POWER AMP)		
IC6			NJM2058D	IC(OP AMP X4)		
Q2			2SC3708(S)	TRANSISTOR		
Q4			2SA1048(GR)	TRANSISTOR		
Q5		*	2SB829(Q,R,S)	TRANSISTOR		
Q6			2SC2655(Y)	TRANSISTOR		
Q7		*	2SA817A(Y)	TRANSISTOR		
Q8			2SC2458(GR)	TRANSISTOR		
Q9 -12			2SD1062(S)	TRANSISTOR		
Q13 ,14			2SC3708(S)	TRANSISTOR		
Q15			2SA970(GR)	TRANSISTOR		
Q16			2SC2458(GR)	TRANSISTOR		
Q102			2SC3421(Y)	TRANSISTOR		
Q103		*	2SC3854(Y,O)	TRANSISTOR		
Q104		*	2SA1490(Y,O)	TRANSISTOR		
Q105			2SC2458(GR)	TRANSISTOR		
Q202			2SC3421(Y)	TRANSISTOR		
Q203		*	2SC3854(Y,O)	TRANSISTOR		
Q204		*	2SA1490(Y,O)	TRANSISTOR		
Q205			2SC2458(GR)	TRANSISTOR		
ZD4 ,5		*	HZ9B2	ZENER DIODE		
ZD7			HZ5C-1	ZENER DIODE		
ZD18			HZ5C-3	ZENER DIODE		

E: Scandinavia & Europe **H:**Audio Club **K:** USA **P:** Canada **W:**Europe
A : Saudi Arabia **T:** England **U:** PX(Far East, Hawaii)
UE : AAFES(Europe) **X:** Australia **M:** Other Areas

⚠ indicates safety critical components.

SPECIFICATIONS

Specifications subject to change without notice

Main amp section

Maximum output power (1 kHz, 4 Ω)	140 W + 140 W
Maximum rated output power(10% THD, 1 kHz, 4 Ω)	95 W + 95 W
Rated output power(1% THD, 20 Hz - 30 kHz, 4 Ω)	80 W + 80 W
Frequency response (−3 dB)	2 Hz - 100 kHz
Minimum distortion (10 W, 1 kHz, 4 Ω)	0.005%
Input sensitivity (at rated output) Max.	0.1 V
Min.	2.0 V
Signal-to-noise ratio (IHF-A)	100 dB
Input impedance	10 kΩ
Damping factor (1 kHz)	More than 100

General

Operating voltage (GND)	14.4 V (11 - 16 V)
Current consumption	19.0 A
Dimensions (W × H × D)	240 × 57 × 200 mm
	9-7/16 × 2-1/4 × 7-7/8 in
Weight	3.3 kg
	7.3 lb

Note :
Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on, the Europe (E) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

TRIO-KENWOOD CORPORATION
Shionogi Shibuya Building, 17-5, 2-chome Shibuya, Shibuya-ku, Tokyo 150, Japan

KENWOOD ELECTRONICS
DIVISION OF KENWOOD U.S.A. CORPORATION
1315 E. Watsoncenter Rd., Carson, California 90745, U.S.A.
75 Seaview Drive, Secaucus, New Jersey 07094, U.S.A.

TRIO-KENWOOD CANADA INC.,
1070 Jayson Court, Mississauga, Ontario, Canada L4W 2V5

TRIO-KENWOOD ELECTRONICS, N.V.
Leuvensesteenweg 504 B-1930 Zaventem, Belgium

TRIO-KENWOOD ELECTRONICS GmbH
Rembrücker Str. 15, 6056 Heusenstamm, West Germany

TRIO-KENWOOD FRANCE S.A.
5, Boulevard Ney, 75018 Paris, France

TRIO-KENWOOD (AUSTRALIA) PTY. LTD. (INCORPORATED IN N.S.W.)
4E Woodcock Place, Lane Cove, N.S.W. 2066, Australia

KENWOOD & LEE ELECTRONICS, LTD.
Wang Kee Building, 5th Floor, 34-37, Connaught Road, Central, Hong Kong

KENWOOD

STEREO POWER AMPLIFIER

KAC-8020

INSTRUCTION MANUAL

TRIO-KENWOOD CORPORATION

©PRINTED IN JAPAN B50-6148-00(E)(T)
87/12 11 10 9 8 7 6 5 4 3 2 1 86/12 11 10 9 8 7 6 5 4 3

Take the time to read through this instruction manual. Familiarity with installation and operation procedures will help you obtain the best performance from your new power amplifier.

For your records

Record the serial number found on the bottom of the unit in the spaces designated on the warranty card and in the space provided below. Refer to the model and serial numbers whenever you call upon your KENWOOD dealer for information or service on this product.

Model KAC-8020 Serial number _____

Care and Maintenance

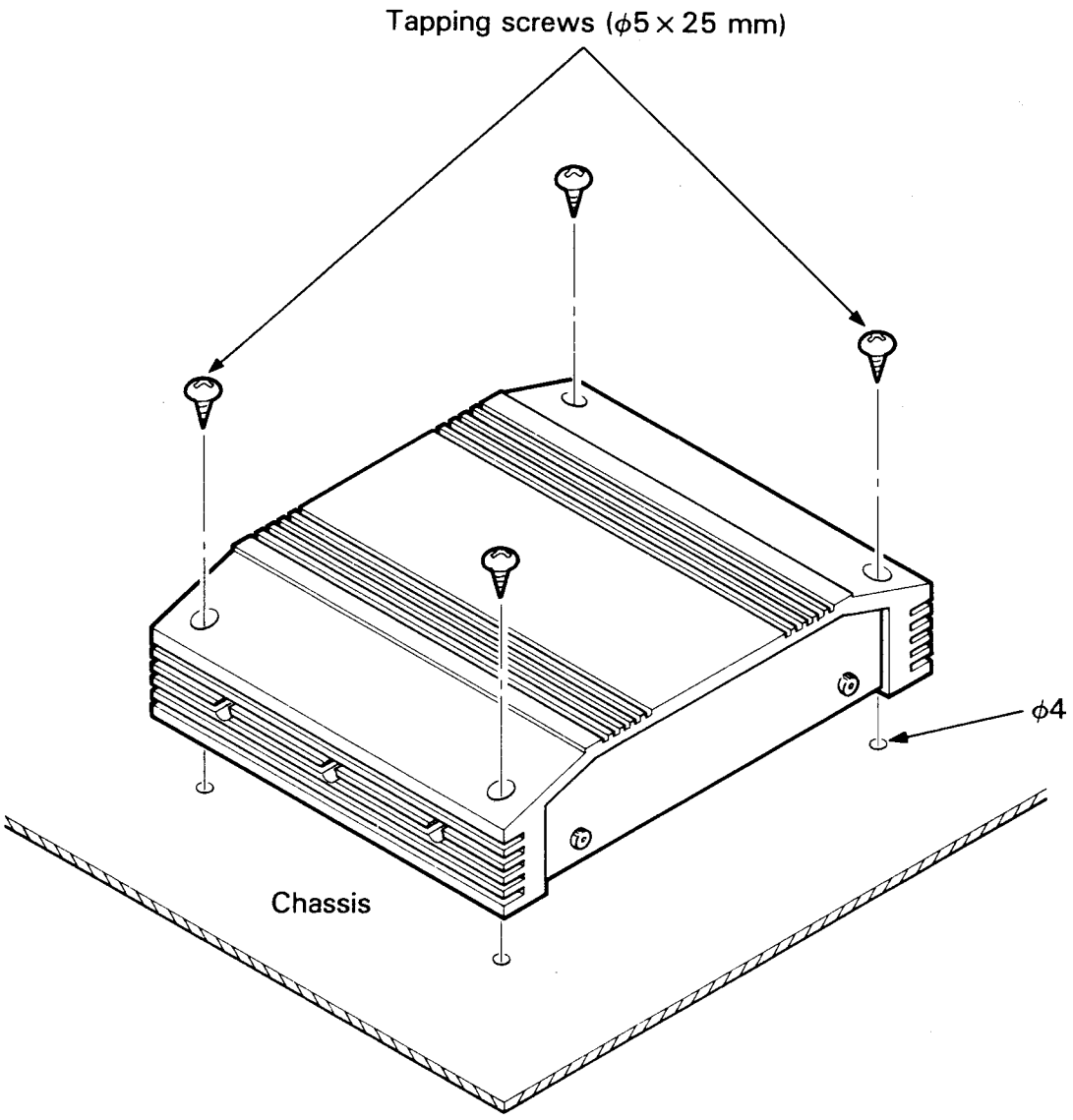
- The power source of this unit is exclusively DC 12 V, negative ground. If you wish to mount the unit on a vehicle with DC 24 V, please consult your appointed KENWOOD dealer.
- Do not place the amplifier in a place where the amplifier may be exposed to direct sunlight, heat or moisture. Be careful that metal objects and water do not enter the set.
- If you have difficulty in installing the set in your car, please contact your KENWOOD dealer.

Cleaning

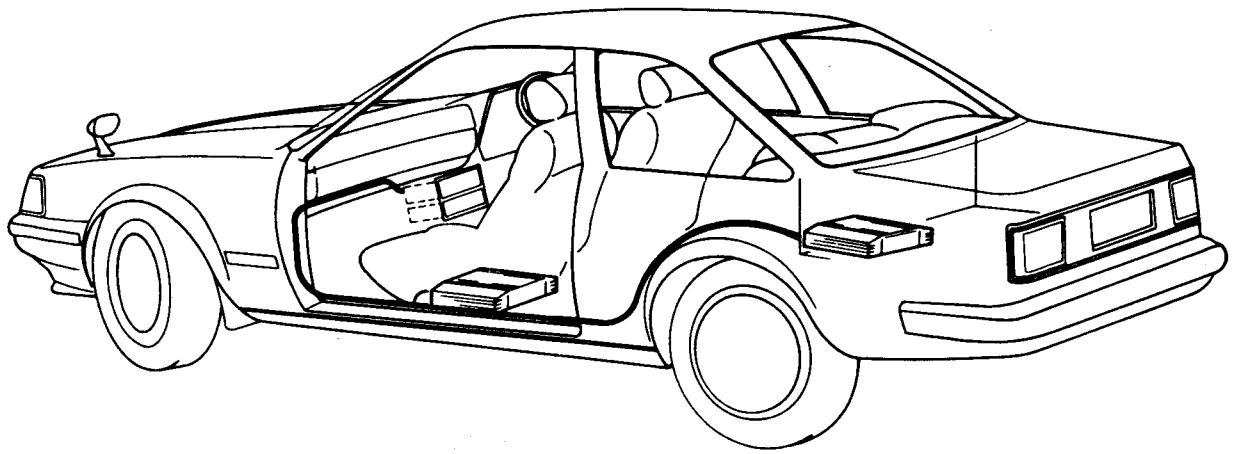
Clean with a dry silicone cloth or a soft cloth. The use of thinner, alcohol or other solvents may damage the surface finish.

Installation

* When installing to the car, install the unit securely for safety driving.

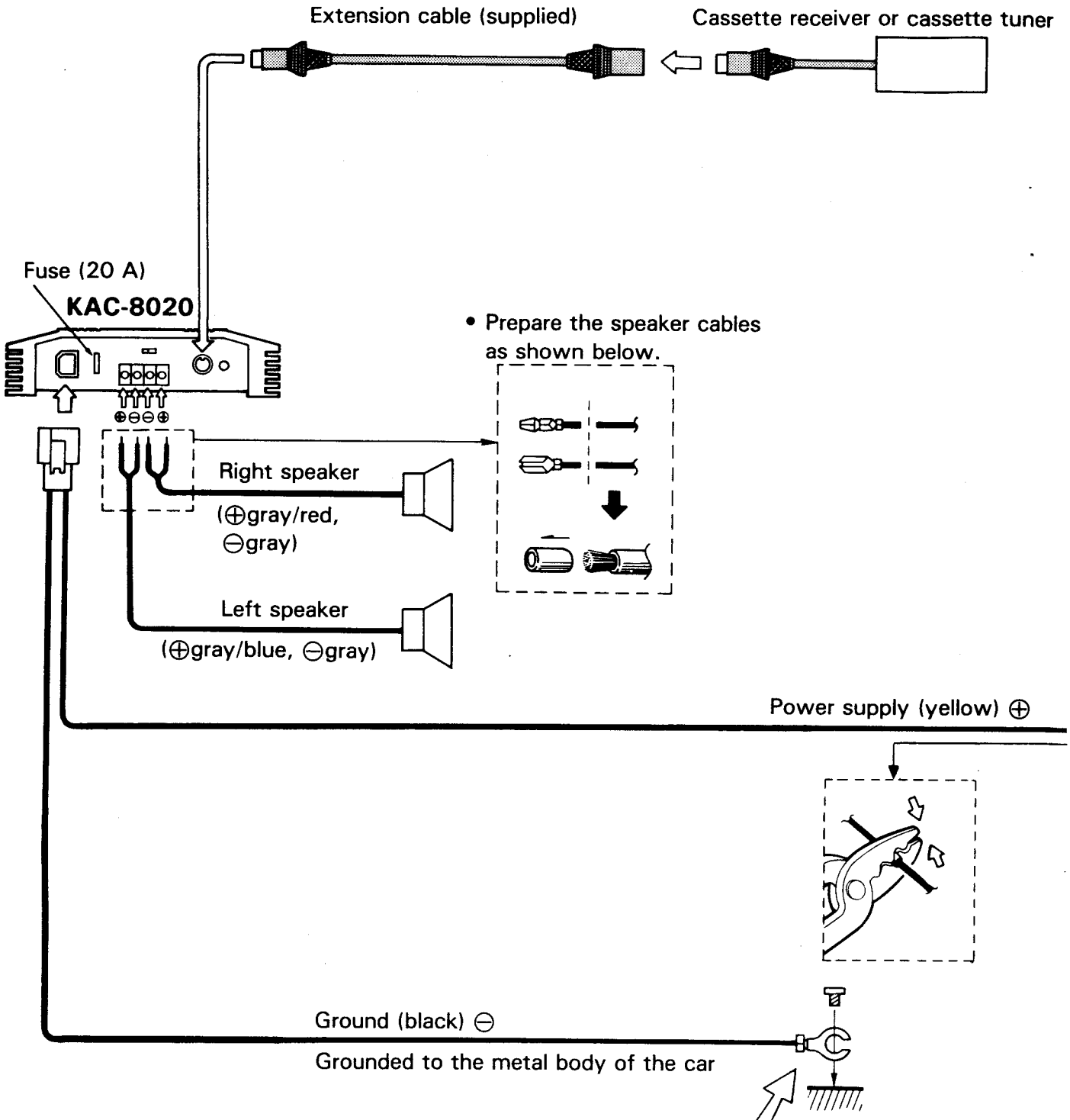


- Use screws supplied as accessories when installing the unit.



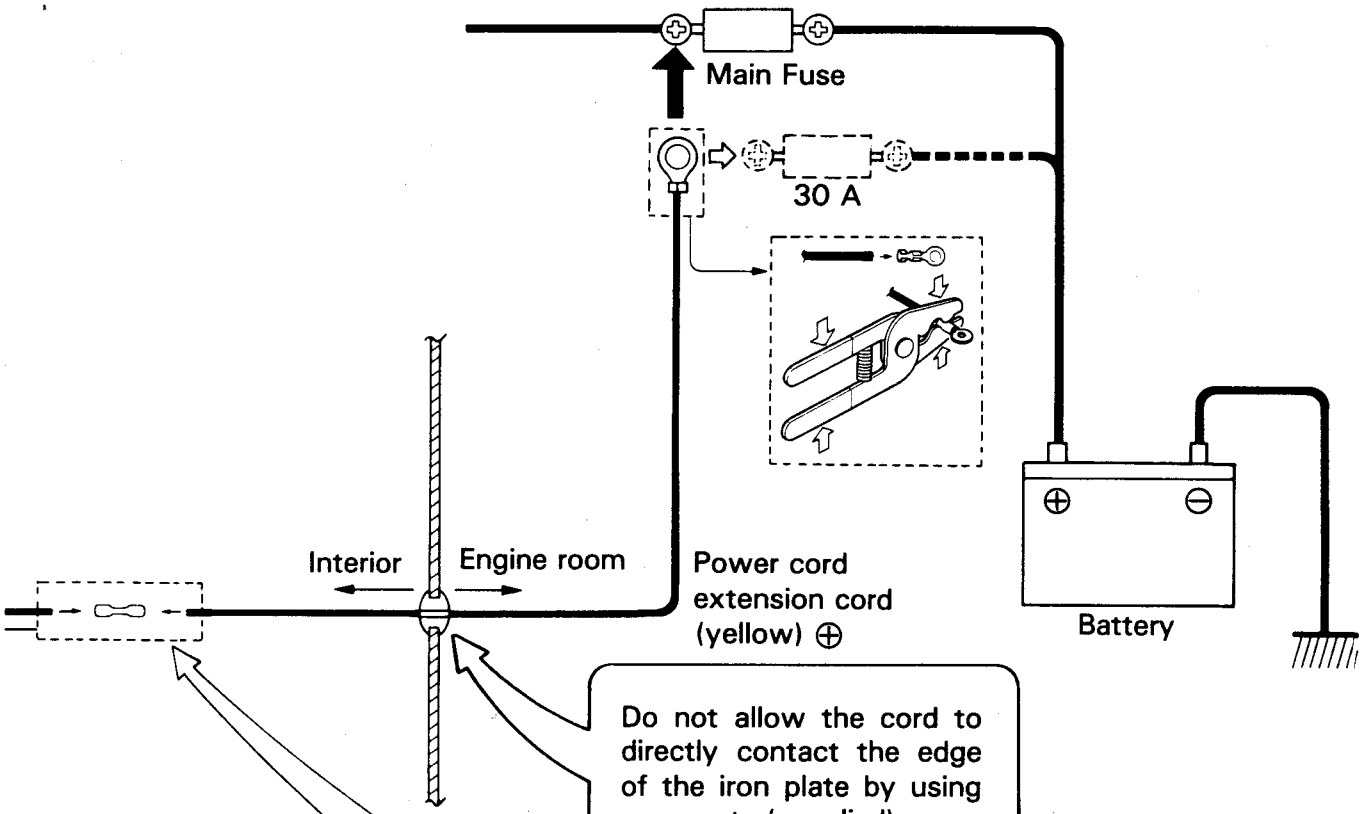
- Since the power amplifier has no parts which require operation, it can be installed at a position away from the driver's seat without any hinderances. But due to its considerable weight, it needs to be installed securely.
- Use the extension cables CA-18F (1 m), CA-28F (2 m), and CA-48F (4 m) (optional) when the connected models are to be installed away from the power amplifier.
- As generally accepted positions for its installation, places such as under the front seat or inside the trunk, etc. can be considered.
- Install the unit in a well-ventilated place and do not place any (heavy) object on it.

Connection

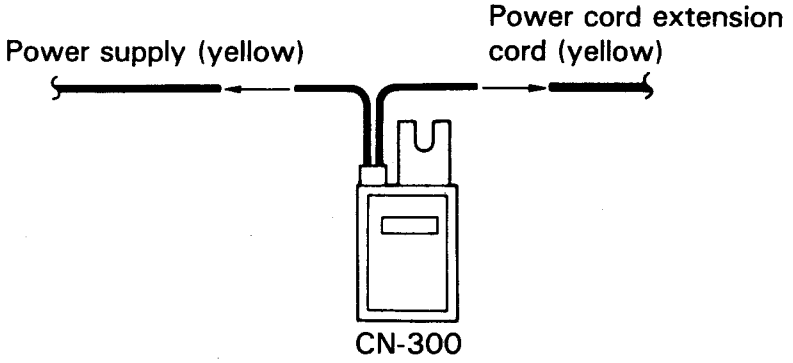


Connect the ground lead to the metal part which is connected to the (−) terminal of the battery.

• Make sure the main fuse of the car is connected between the power source line (yellow) and the battery. If the main fuse cannot be located, connect a new 30 A fuse.

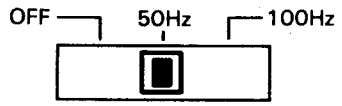


● If you hear a noise when starting the engine, connect the line noise filter CN-300 (optional) to the power source (yellow) of this unit.



Connection

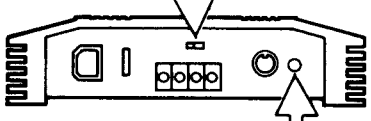
SUBWOOFER



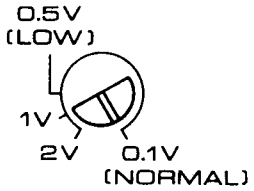
• Subwoofer selector
This selector is for selecting speaker output mode, normal or subwoofer.
When the subwoofer selector is set to 50 Hz or 100 Hz, the output level is increased by 6 dB.

Adjust the ouput level with the sensitivity control.
OFF: The normal signal is output from the speaker output terminals.
50 Hz: Super low-frequency signal having the cut-off frequency of 50 Hz, cut-off slope of 18 dB/oct is output from the speaker out terminals for connecting the sub-woofer.
100 Hz: Super low-frequency signal having the cut-off frequency 100 Hz, cut-off slope 18 dB/oct is output from the speaker output terminals for connecting to the sub-woofer.

KAC-8020



SENSITIVITY



• Input sensitivity control
The input sensitivity control adjusts the input sensitivity within a range of 0.1 V to 2.0 V continuously, enabling expansion with various systems.
Normally, set the input sensitivity control to 0.1 V (NORMAL) position for KENWOOD cassette receiver or cassette tuner. When the output voltage selector of the cassette receiver or cassette tuner is set to 1 V, set this to 0.5 V (LOW).

Precautions

Since the electrical consumption of this unit is large, obtaining power source from wirings such as those of built-in cigarette lighters will overload the wiring of the car.
Be sure to connect the yellow power lead directly to the battery as shown in the figure before.

- Before starting to install the set, make sure to remove the negative (−) terminal of the battery in order to prevent shortcircuiting.
- When installation and wiring are completed, connect the negative (−) terminal of the battery after confirming that there are no errors.
- When a fuse is blown out, check for any shortcircuiting of cords, and then replace it with a fuse having the specified capacity.
- The maximum output power of this unit is 140 W + 140 W. Therefore, the power handling capacity of the speakers connected to this unit should be 140 W or more. If a speaker with a smaller handling capacity is connected and driven at a high level, the speaker unit may be damaged.

Specifications

Specifications subject to change without notice

Main amp section

Maximum output power (1 kHz, 4 Ω) ..... 140 W + 140 W
Maximum rated output power(10% THD, 1 kHz, 4 Ω) ..... 95 W + 95 W
Rated output power(1% THD, 20 Hz - 30 kHz, 4 Ω) ..... 80 W + 80 W
Frequency response (−3 dB) ..... 2 Hz - 100 kHz
Minimum distortion (10 W, 1 kHz, 4 Ω) 0.005%
Input sensitivity (at rated output) Max. ..... 0.1 V
Min. ..... 2.0 V
Signal-to-noise ratio (IHF-A) ..... 100 dB
Input impedance ..... 10 kΩ
Damping factor (1 kHz) ..... More than 100

General

Operating voltage (GND) ..... 14.4 V (11 - 16 V)
Current consumption ..... 19.0 A
Dimensions (W × H × D) ..... 240 × 57 × 200 mm
9-7/16 × 2-1/4 × 7-7/8 in
Weight ..... 3.3 kg
7.3 lb